

(2) **Equipment and protection systems intended for use in potentially explosive atmospheres**  
**Directive 94/9/CE**

(1) **EC-TYPE EXAMINATION CERTIFICATE**

(3) Number of the EC type examination certificate: **INERIS 00ATEX0021 X**

(4) Protection apparatus or system:

**ENCLOSURE TYPE EJB...**

(The type is completed by numbers and/or letters corresponding to manufacturing variation)

(5) Manufacturer: **ITALSMEA**

(6) Address: **Via per Cernusco, 15  
20060 BUSSERO (MI)  
ITALY**

(7) This protection system or equipment and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.

(8) The INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/CE 23 the Mars 1994, certifies that this protection system or equipment fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protection systems intended for use in potentially explosive atmospheres, described in appendix II of the Directive.

The examinations and the tests are consigned in official report N°15443/00.

(9) The respect of the Essential Health and Safety Requirements is ensured by:

- conformity with:

EN 50 014	of June 1997
EN 50 018	of August 1994
EN 50 020	of August 1994
EN 50 281-1-1	of September 1998

- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

(10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protection system is subjected to the special conditions for safe use, mentioned in the annex of this certificate.

- (11) This EC type examination certificate refers only to the design and the construction of the apparatus or protection system specified. If necessary, other requirements of this Directive will be imposed on the manufacture and the supply of this apparatus or protection system.
- (12) The marking of the equipment or the protection system will have to contain:



II 2 GD

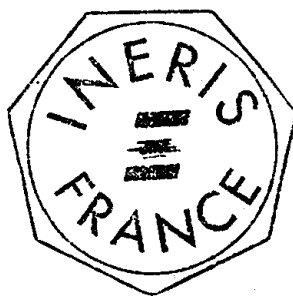
EEx d IIB T6 or T5 or T4 or EEx d [ia] IIB T6 or EEx d [ib] IIB T6

Verneuil-en-Halatte, 2000 11 15

X. LEFEBVRE

Engineer at the Laboratory of Certification of  
Materials ATEX

The Director of the Organisation Certified,  
By delegation  
B. PIQUETTE  
Deputy manager of Certification



(13)

## ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 00ATEX0021 X

(15)

### DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM

Metallic enclosures of different sizes intended to contain equipment defined in technical note. These enclosures can be fitted with any control auxiliaries and lighting.

These enclosures can be fitted with drain and/or breather devices types ECR-1 and ECR-2. The cover can be move with hinges fixed on the body.

Enclosures present a degree of protection IP65 according to European standard EN 60 529.

Enclosures can be fitted with IS elements and None IS elements or only with IS elements. Different elements of intrinsic safety are defined in technical note and are of a certified type.

When boxes contain both IS and None IS elements, they are fitted with internal thermal probe.

Enclosures in EEx d variation, can be used at an ambient temperature lower than -20°C, (-30°C maxi).

Enclosures in EEx d[ia] or d[ib] variation, can be used at an ambient temperature lower than -20°C, (-25°C maxi).

### PARAMETERS RELATING TO THE SAFETY

For using in ambient temperatures inferior to -20°C (-30°C maxi), the manufacturing is previewed by the manufacturer under his responsibility.

Type test have been performed under ambient temperatures required by standards

Supply voltage : from 12 to 440 V(DC) or  
from 24 to 690 V(AC)  
Frequency : 50 / 60 Hz

Power of lamps fitting with signal lamps  
- 5 watts for incandescent lamps with T4 temperature class  
- 1 watt for LED

Power of anti moisture resistance :250W

Thermal probe characteristic :  
Limit of release : 50 °C ± 5°C.

Maximum dissipated powers:

**EEx d enclosure for an ambient temperature of 40°C**

Box Type	Dissipated maximum power (W) according temperature class			
	T6	T5	T4	I max (A)
EJB 2 ; 3 ; 3A	30	40	60	50
EJB 4 ; 5	50	65	100	100
EJB 6	100	130	190	180
EJB 8 ; 9	180	230	350	260
EJB 10 ; 11	225	315	400	350
EJB 12	300	380	450	350
EJB 13	350	430	500	800
EJB 13A	400	480	530	800

**EEx d enclosure for an ambient temperature of 50°C**

Box Type	Dissipated maximum power (W) according temperature class			
	T6	T5	T4	I max (A)
EJB 2 ; 3 ; 3A	20	30	45	50
EJB 4 ; 5	35	45	75	100
EJB 6	75	95	140	180
EJB 8 ; 9	135	170	260	260
EJB 10 ; 11	165	235	300	350
EJB 12	225	285	335	350
EJB 13	260	320	375	800
EJB 13A	300	360	395	800

**EEx d enclosure for an ambient temperature of 55°C**

Box Type	Dissipated maximum power (W) according temperature class			
	T6	T5	T4	I max (A)
EJB 2 ; 3 ; 3A	15	25	35	50
EJB 4 ; 5	30	40	60	100
EJB 6	60	80	115	180
EJB 8 ; 9	110	140	210	260
EJB 10 ; 11	135	190	240	350
EJB 12	180	230	270	350
EJB 13	210	260	300	800
EJB 13A	240	290	320	800

**EEx d enclosure containing only terminals**

Terminal Section	Maximum Intensity (A)	Maximum number of terminals	Terminal Section	Maximum Intensity (A)	Maximum number of terminals
2,5 mm <sup>2</sup>	16 A	(*)	50 mm <sup>2</sup>	125 A	(*)
4 mm <sup>2</sup>	25 A	(*)	70 mm <sup>2</sup>	160 A	(*)
6 mm <sup>2</sup>	32 A	(*)	95 mm <sup>2</sup>	200 A	(*)
10 mm <sup>2</sup>	40 A	(*)	120 mm <sup>2</sup>	250 A	(*)
16 mm <sup>2</sup>	63 A	(*)	185 mm <sup>2</sup>	315 A	(*)
25 mm <sup>2</sup>	80 A	(*)	240 mm <sup>2</sup>	400 A	(*)
35 mm <sup>2</sup>	100 A	(*)			(*)

(\*) The maximum permitted number of terminals is a function of the maximum dissipated power in the enclosure; the powers are the suitable ones in tables above for EEx d variations.


**EEx d [ia] or [ib] enclosure for an ambient temperature of 40°C**

Box type	Power (W) Class T6	Maximum number of IS elements
EJB 2 ; 3 ; 3A	25	4
EJB 4 ; 5	30	6
EJB 6	50	8
EJB 8 ; 9	80	8
EJB 10 ; 11	140	10
EJB 12	200	12
EJB 13	260	20
EJB 13A	360	20

**MARKING**

Marking must be readable and indelible; it must comprise the following indications:

**A) Enclosure without intrinsic safety element :**

- **ITALSMEA**  
Via per Cernusco, 15  
20060 BUSSERO (MI)  
ITALY
- EJB ... (1)
- INERIS 00ATEX0021 X
- (Serial number, if any)
- (year of construction)
-  **II 2 GD**
- EEx d IIB (\*)
- T.Amb : (\*\*)
  - (\*\*\*)
  - (\*\*\*\*)
- DO NOT OPEN WHEN ENERGIZED

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation.


**for use in explosive gas atmospheres**

- (\*) T6 or T5 or T4
- (\*\*) -30°C to 40°C or -30°C to 50°C or -30°C to 55°C
- (\*\*\*\*) T.cable : 90°C for temperature class T4

**for use in explosive dust atmospheres**

- (\*) T85°C or T100°C or T135°C
- (\*\*) -30°C to 40°C or -30°C to 50°C or -30°C to 55°C
- (\*\*\*) IP65
- (\*\*\*\*) T.cable : 90°C for T135°C

**B) Enclosures with intrinsic safety elements :**

- **ITALSMEA**  
Via per Cernusco, 15  
20060 BUSSERO (MI)  
ITALY
- EJB ... (1)
- INERIS 00ATEX0021 X
- (Serial number, if any)
- (year of construction)
-  II 2 GD
- EEx d [\*] IIB (\*\*)
- (\*\*\*)
- DO NOT OPEN WHEN ENERGIZED

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation.

**for use in explosive gas atmospheres**

- (\*) [ia] or [ib]
- (\*\*) T6

**for use in explosive dust atmospheres**

- (\*) [ia] or [ib]
- (\*\*) T85°C
- (\*\*\*) IP65

The whole of marking can be carried out in the language of the country of use.

The protection apparatus or system must also carry the marking normally envisaged by the standards of construction which relate to it.

### **ROUTINE EXAMINATIONS AND TESTS**

Each example of the equipment hardware defined above must have successfully passed before delivery an overpressure test in accordance with section 16.1 of standard EN 50 018, of a period comprised between 10 and 60 seconds under :

- 11,5 bar for EJB2 to EJB 12
- 9 bar for EJB 13 and EJB 13A.

### **(16) DESCRIPTIVE DOCUMENTS**

The technical report is composed of the documents quoted hereafter, constituting the descriptive file of the apparatus, object of this certificate.

- Official report N°15443/00 of the 2000.11.13
- Descriptive Notice TN-10-2000-01 (28 pages) signed on 2000.10.18
- Instruction Notice (5 pages) signed on 2000.10.18
- Plan n° C10200000 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200001 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200002 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200003 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200004 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200005 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200001 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200002 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200003 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200004 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200005 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200006 Rev 0 of 2000.02.02 signed on 2000.02.02

### **(17) SPECIAL CONDITIONS FOR SAFE USE**

The yield stress of the fastener elements of each part the flame proof casing must be at least equal to 780 N/mm<sup>2</sup>.

Enclosures EEx d variations are intended to be used in an ambient temperatures range of -30°C to 55°C.

Enclosures EEx d [ia] or EEx d [ib] variations are intended to be used in an ambient temperatures range of -25°C to 40°C.

User shall connect on intrinsic safety terminals only elements which maximum characteristics shall be below or equal to characteristics defined in technical note.

The interconnection of external circuit to this material shall be in accordance with intrinsic safety.

Enclosures containing None IS and IS shall be fitted with an internal probe switching off enclosure when thermal probe is at his rate i.e. 50°C± 5°C.

For use in potentially explosive atmospheres due to combustible dust:

- The surface of joint flanged gap between cover and body shall be covered with grease, for example silicone and cable entries shall be of a degree of protection at least IP6X.
- User shall perform a regular cleaning of enclosure to limit dust layers on enclosure sides.

These special conditions are defined in instruction notice.

**(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH**

The respect of the Essential Health and Safety Requirements is ensured by:

- conformity to the European standards EN 50 014, EN 50 018, EN 50 020 and EN 50 281-1-1
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.



## ADDITION

INERIS 00ATEX0021 X / 01

ENCLOSURE TYPE EJB...

Manufactured by ITALSMEA

### (15) - PURPOSE OF THE ADDITION

Mounting of a cover fitted with a glass window.

### PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as followed:

Enclosures EEx d for an ambient temperature : 40°C

Box Type	Dissipated maximum power (W) according to temperature class		
	T6	T5	T4
EJB 2-3-3A	24	34	54
EJB 4-5	40	55	90
EJB 6	80	110	171
EJB 8-9	144	195	315
EJB 10-11	180	268	360
EJB 12	240	323	405
EJB 13	280	365	450
EJB 13A	320	408	477

Enclosures EEx d for an ambient temperature: 50°C

Box type	Dissipated maximum power (W) according to temperature class		
	T6	T5	T4
EJB 2-3-3A	16	25	40
EJB 4-5	28	38	67
EJB 6	60	80	126
EJB 8-9	108	144	234
EJB 10-11	132	200	270
EJB 12	180	242	301
EJB 13	208	272	337
EJB 13A	240	306	355

**Enclosures EEx d for an ambient temperature: 55°C**

Type box	Dissipated maximum power (W) according to temperature class		
	T6	T5	T4
EJB 2-3-3A	12	21	31
EJB 4-5	24	34	54
EJB 6	48	68	103
EJB 8-9	88	119	189
EJB 10-11	108	161	216
EJB 12	144	195	243
EJB 13	168	221	270
EJB 13A	192	246	288

**MARKING**

The marking defined in the basic certificate is unchanged.

**ROUTINE EXAMINATIONS AND TESTS**

The routine verifications and tests stipulated by the basic certificate are unchanged.

**(16) - DESCRIPTIVE DOCUMENTS**

The documents referred to below, constitute the file describing the modifications of the apparatus and forming the subject of the present addition.

- Technical notice TN-10-2000-01 (8 sheets) dated of 2000 10 18 rev.n°1 dated of 2002 01 23
- Plan C10200006 dated and signed of 2002 02 13

**(17) - SPECIFIC PARAMETERS OF THE TYPES OF PROTECTION CONCERNED**

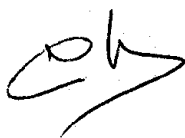
The special condition for safe use defined in the basic certificate is modified as follows:

The yield stress of the fastener elements of each part the flame proof casing must be at least equal to 450 N/mm<sup>2</sup>.

(18) **ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH**

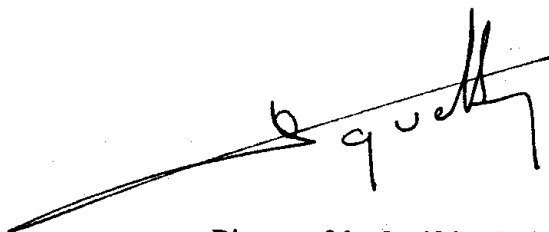
The respect of the Essential Health and Safety Requirements is unchanged.

Verneuil-en-Halatte, 2002 02 24



X. LEFEBVRE

Engineer at the Laboratory of Certification of  
Materials ATEX



Director of the Certifying Body,  
By delegation  
B. PIQUETTE  
Deputy manager of Certification



## ADDITION

INERIS 00ATEX0021 X / 02

ENCLOSURE TYPE EJB...

Manufactured by ITALSMEA

### (15) - PURPOSE OF THE ADDITION

Specific construction for group IIB +H<sub>2</sub>.

As a variation, modification of minimal ambient temperature up to -35°C.

### PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety indicated in the basic certificate are unchanged.

For using in ambient temperatures inferior to -20°C (-35°C maxi), the manufacturing is previewed by the manufacturer under his responsibility.


Enclosures in EEx d variation, can be used at an ambient temperature lower than -20°C, (-35°C maxi).

Enclosures in EEx d[ia] or d[ib] variation, can be used at an ambient temperature lower than -20°C, (-25°C maxi).

### MARKING

The marking defined in the basic certificate is modified as follows:


A) Enclosure without intrinsic safety element :

-  II 2 GD
- Ex d IIB+H<sub>2</sub> (\*)
- T.Amb : (\*\*)

**for use in explosive gas atmospheres**

- (\*) T6 or T5 or T4
- (\*\*) -35°C to 40°C or -35°C to 50°C or -35°C to 55°C

B) Enclosure with intrinsic safety element :

-  II 2 GD
- Ex d [\*]IIB+H<sub>2</sub> (\*\*) (\*)
- T.Amb : -25°C to 40°C

**for use in explosive gas atmospheres**

- [\*] [ia] or [ib]
- (\*\*) T6

### ROUTINE EXAMINATIONS AND TESTS

The routine verifications and tests stipulated by the basic certificate are unchanged.

(16) - DESCRIPTIVE DOCUMENTS

The documents referred to below, constitute the file describing the modifications of the apparatus and forming the subject of the present addition.

- Technical notice TN-11-2002-01 Rev 0 (28 sheets) dated and signed of 2002 02 28.
- Plans C11200200 to C11200204 dated and signed of 2002 02 27
- Plans C11200206 to C11200211 dated and signed of 2002 02 27

(17) - SPECIFIC PARAMETERS OF THE TYPES OF PROTECTION CONCERNED

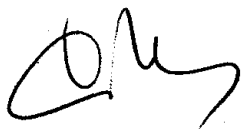
The special condition for safe use defined in the basic certificate and the extension 01 are unchanged.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

The respect of the Essential Health and Safety Requirements is ensured by:

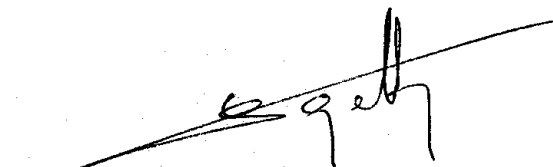
- conformity to the standards IEC60079-0, IEC60079-1, IEC60079-11, IEC61241-1-1.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

Verneuil-en-Halatte, 2002 12 24



X. LEFEBVRE

Engineer at the Laboratory of Certification  
Materials ATEX



Director of the Certifying Body,  
By delegation  
B. PIQUETTE

Deputy manager of Certification



## ADDITION

INERIS 00ATEX0021 X / 03

ENCLOSURE TYPE EJB..

Manufactured by ITALSMEA

### (15) - PURPOSE OF THE ADDITION

As a variation:

Maximum supply voltage up to 20 kV

Manufacturing for use in class T3

### PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as followed:

The unit fitted with windows are not intended for a temperature class T3.


The values of dissipated power in the unit for class T3 are increased of 15% versus the values indicated in the basic certificate for T4 temperature class for each relevant range of ambient temperature.

Supply voltage : from 12 to 440 V(DC) or  
from 24 to 20kV (AC)

### MARKING

The marking defined in the basic certificate is modified as follows:

A) Enclosure without intrinsic safety element :

-  II 2 GD
- Ex d IIB+H<sub>2</sub> (\*) or EEx d IIB(\*)
- T.Amb : (\*\*)
- T.cable : 90°C for T135°C (T4) or 120°C for T200°C(T3)

for use in explosive gas atmospheres

(\*) T6 or T5 or T4 or T3

(\*\*) -35°C to 40°C or -35°C to 50°C or -35°C to 55°C

for use in explosive dust atmospheres

(\*) T85°C or T100°C or T135°C or T200°C

(\*\*) -35°C to 40°C or -35°C to 50°C or -35°C to 55°C

(\*\*\*) IP 65

(\*\*\*\*) T.cable : 90°C for T135°C or 120°C for T200°C

**ROUTINE EXAMINATIONS AND TESTS**

The routine verifications and tests stipulated by the basic certificate are unchanged.

**(16) - DESCRIPTIVE DOCUMENTS**

The documents referred to below, constitute the file describing the modifications of the apparatus and forming the subject of the present addition.

- Instructions (4 pages) rev.2 dated on of 2004 09 09

**(17) - SPECIFIC PARAMETERS OF THE TYPES OF PROTECTION CONCERNED**

The special condition for safe use defined in the basic certificate and the extension 01 and 02 are unchanged.

**(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH**

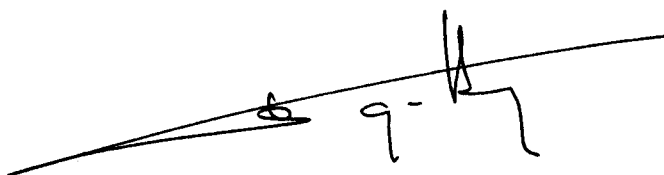
The respect of the Essential Health and Safety Requirements defined in the basic certificate and the extension 0 1 and 02 is unchanged.

Verneuil-en-Halatte, 2004 09 09



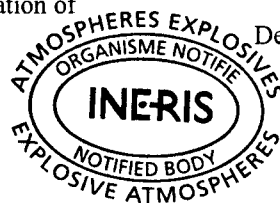
X. LEFEBVRE

Engineer at the Laboratory of Certification of  
Materials ATEX



Director of the Certifying Body,  
By delegation  
B. PIQUETTE

Deputy manager of Certification



## **ADDITION**

**INERIS 00ATEX0021 X / 04**

**ENCLOSURE TYPE EJB...**

**Manufactured by ITALSMEA**

### **(15) - PURPOSE OF THE ADDITION**

As a variation:

Manufacturing for use in a range of ambient temperature of -50°C to + 55°C

### **PARAMETERS RELATING TO THE SAFETY**

The parameters relating to the safety defined in the basic certificate and extensions 01 to 03 are not modified.

For an use under a minimum ambient temperature between -20°C and -50°C, specific type tests have been performed under -50°C.

### **MARKING**

The marking defined in the basic certificate and extensions 01 to 03 is modified as follows:

- T.Amb : (\*\*)

**for use in explosive gas atmospheres and for use in explosive dust atmospheres**

(\*\*) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C  
or -20°C to 50°C or -20°C to 55°C

**This indication mandatory is the range of ambient temperature differs from -20°C/+40°C**

### **ROUTINE TESTS AND EXAMINATIONS**

The routine verifications and tests stipulated by the basic certificate are modified as follows:

For an use under a minimum ambient temperature between -20°C and -50°C, the routine test prescribed by the basic certificate and defined by EN 50 018 is to be performed under the value of 17 bar.



**(16) - DESCRIPTIVE DOCUMENTS**

The documents referred to below, constitute the file describing the modifications of the apparatus and forming the subject of the present addition.

- Descriptive Notice TN-10-2000-01 (10 pages) rev 1 dated and signed of 2004 09 14
- Instruction Rev3(4 pages) rev 3 dated and signed of 2004 09 14

**(17) - SPECIFIC PARAMETERS OF THE TYPES OF PROTECTION CONCERNED**

The special condition for safe use defined in the basic certificate and the extensions 01 to 03 are unchanged.

Enclosures EEx d variations are intended to be used in an ambient temperatures range of -50°C to 55°C.

Enclosures EEx d [ia] or EEx d [ib] variations are intended to be used in an ambient temperatures range of -25°C to 40°C. For lower temperature, a special variation is defined.

These special conditions are defined in instruction notice.

**(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH**

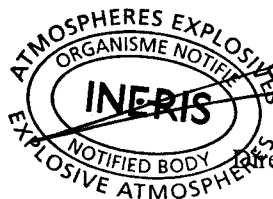
The respect of the Essential Health and Safety Requirements defined in the basic certificate and the extensions is unchanged.

Verneuil-en-Halatte, 2004 11 11



X. LEFEBVRE

Engineer at the Laboratory of Certification of  
Materials ATEX



Director of the Certifying Body,  
By delegation  
B. PIQUETTE  
Deputy manager of Certification

## ADDITION

- (3) INERIS 00ATEX0021X/05
- (4) ENCLOSURE TYPE EJB...
- (5) Manufactured by ITALSMEA

(15) PURPOSE OF THE ADDITION

As a variation:

Up dating of descriptive documents.

Application of new standards :

EN 60079-0 : 2006 , 60079-1 : 2004, 60079-11 : 2007,  
EN 61241-0 : 2006, 61241-1 : 2004, 61241-11 : 2006,  
IEC 60079-0 : 2004, 60079-1 : 2003, 60079-11 : 2006,  
IEC 61241-0 : 2004, 61241-1 : 2004, 61241-11 : 2005.

New address : Via Italia, 33 - 20060 GESSATE (MI) - ITALY

PARAMETERS RELATING TO THE SAFETY


The parameters relating to the safety defined in the basic certificate and extensions 01 to 04 are not modified.

MARKING

The marking defined in the basic certificate and extensions 01 to 04 is modified as follows :

A) Enclosure without intrinsic safety element :

ITALSMEA  
Via Italia, 33  
20060 GESSATE (MI)  
ITALY

 II 2 GD

Ex d IIB (\*) or Ex d IIB+H<sub>2</sub> (\*)

Ex tDA21 IP65 or 66 or 67 (\*)

T.Amb : (\*\*)

T.cable : 90°C for T135°C (T4) or 110°C for T200°C(T3)

**for use in explosive gas atmospheres**

(\*) T6 or T5 or T4 or T3

(\*\*) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C or  
-20°C to 40°C or -20°C to 50°C or -20°C to 55°C


**for use in explosive dust atmospheres**

(\*) T85°C or T100°C or T135°C or T200°C

(\*\*) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C or  
-20°C to 40°C or -20°C to 50°C or -20°C to 55°C

B) Enclosure with intrinsic safety element "ia":


ITALSMEA  
Via Italia, 33  
20060 GESSATE (MI)  
ITALY

 II 2 (1) GD

Ex d [ia] IIB or IIB + H<sub>2</sub> T6  
Ex tD [iaD] or [ia] A21 IP65 or 66 or 67 T85°C (\*)  
T.Amb :-25°C to 40°C or T.Amb :-50°C to 40°C

C) Enclosure with intrinsic safety element "ia" or "ib" :

ITALSMEA  
Via Italia, 33  
20060 GESSATE (MI)  
ITALY

 II 2 (2) GD

Ex d [ia] or [ib] or [ia/ib] IIB or IIB+H<sub>2</sub> T6  
Ex tD [iaD] or [ibD] or [iaD/ibD] or [ia] or [ib] or [ia/ib] A21 IP65 or 66 or 67 T85°C (\*)  
T.Amb :-25°C to 40°C or T.Amb :-50°C to 40°C

**ROUTINE TESTS AND EXAMINATIONS**

The routine verifications and tests stipulated by the basic certificate and extensions 01 to 04 are not modified.

**(16) DESCRIPTIVE DOCUMENTS**

The descriptive documents quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- Descriptive Notice TN-10-2000-01 (10 pages) rev 2 dated and signed of 2007 03 12.
- Instruction (4 pages) rev 5 dated and signed of 2007 03 12.

**(17) SPECIFIC PARAMETERS OF THE TYPES OF PROTECTION CONCERNED**

The special conditions defined in the basic certificate and the extensions 01 to 03 are modified as follows :

Enclosures Ex d variations are intended to be used in an ambient temperatures range of -50°C to 55°C.

Enclosures Ex d [ia] or Ex d [ib] or Ex tD [iaD] or Ex tD [ibD] variations are intended to be used in an ambient temperatures range of -25°C to 40°C. For lower temperature, a special variation is defined.

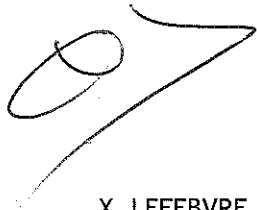
These special conditions are defined in instruction notice.

**(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH**

The respect of the Essential Health and Safety Requirements is ensured by:

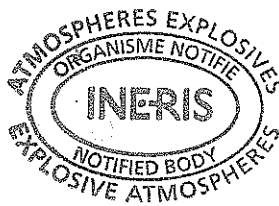
- Conformity to the standards EN or IEC 60079-0, EN or IEC 60079-1, EN or IEC 60079-11, EN or IEC 61241-0, EN or IEC 61241-1, EN or IEC 61241-11.
- The whole of the provisions adopted by the manufacturer and described in the descriptive documents.

Verneuil-en-Halatte, 2007 03 13



X. LEFEBVRE

Engineer at the Laboratory of Evaluation of  
Equipment ATEX



Director of the Certifying Body,  
By delegation  
T. HOUËIX  
Certification Officer  
Certification Division

## ADDITION

(3) INERIS 00ATEX0021X/06

(4) ENCLOSURE Type EJB...

(5) Made by ITALSMEA

(15) **PURPOSE OF THE ADDITION**

Possibility of mounting a photoconductive cell type FTC covered by the EC type examination certificate INERIS 02ATEX9006U. This mounting is only intended for enclosures class T5 or T6 and in range of ambient temperature -20°C to 40°C or to -20°C to 55°C.

**PARAMETERS RELATING TO THE SAFETY**

The parameters relating to the safety is unchanged.

**MARKING**

The marking is modified is unchanged.

**ROUTINE EXAMINATIONS AND TESTS**

The routine examinations and tests are unchanged.

(16) **DESCRIPTIVE DOCUMENTS**

The descriptive documents quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- |                       |                         |                      |
|-----------------------|-------------------------|----------------------|
| - Addendum n°1        | of 2008.05.13 (4 pages) | signed on 2008.05.13 |
| - Drawing n°C11200800 | of 2008.05.11           | signed on 2008.05.13 |

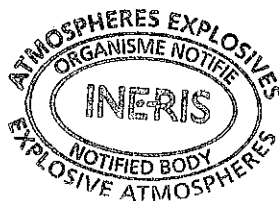
(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions are unchanged.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is unchanged.

Verneuil-en-Halatte, 2008 12 17



Director of the Certifying Body,  
By delegation  
T. HOUeix  
Certification Officer  
Certification Division

**ADDITION**(3) **INERIS 00ATEX0021X/07**(4) **ENCLOSURE TYPE EJB...**(5) **Made by ITALSMEA**(15) **PURPOSE OF THE ADDITION**

Addition of a new trademark: "TECHNOR ITALSMEA"

Increase of maximum ambient temperature to +55°C for enclosures containing intrinsic safety devices.

**PARAMETERS RELATING TO THE SAFETY**

The parameters relating to the safety are completed as follow :

The enclosures containing intrinsically safe devices are intended to be used until a maximum ambient temperature of 55°C. The enclosures containing intrinsic safety and non intrinsic safety devices are equipped with an internal thermostat which switch-off the power supply of the enclosure when the threshold of release is reached.

The maximum dissipated powers are modified as follow:

Ex d[i.] and/or Ex tD[i.] enclosures for an ambient temperature up to 55 °C		
Enclosure type	Maximum dissipated powers (W) T6/T85 °C temperature class	Maximum number if IS devices
EJB 2-3-3A	12	4
EJB 4-5	24	6
EJB 6	48	8
EJB 8-9	88	8
EJB 10-11	108	10
EJB 12	144	12
EJB 13	168	20
EJB 13A	192	20

Thermostat threshold of release is defined by the ambient temperature of intrinsic safety devices as follow:

Thermostat threshold of release	Ambient temperature for the enclosure	Ambient temperature for intrinsic safety devices
55°C ± 5°C	55°C	≥ 60°C
65°C ± 5°C	55°C	≥ 70°C

### MARKING

The marking is modified as follow :

#### A) Enclosure without intrinsic safety devices :

ITALSMEA or TECHNOR ITALSMEA


I-20060 GESSATE (MI)

EJB...(1)

INERIS 00ATEX0021X

(Serial number)

(Year of construction)

 II 2 GD

Ex d IIB (\*) or Ex d IIB+H<sub>2</sub> (\*)

Ex tDA21 IP65 or 66 or 67 (\*)

T.Amb : (\*\*)

T.cable : 90°C for T135°C (T4) or 110°C for T200°C (T3)

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation

#### for use in explosive gas atmospheres

(\*) T6 or T5 or T4 or T3

(\*\*) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C or  
-20°C to 40°C or -20°C to 50°C or -20°C to 55°C

#### for use in explosive dust atmospheres

(\*) T85°C or T100°C or T135°C or T200°C

(\*\*) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C or  
-20°C to 40°C or -20°C to 50°C or -20°C to 55°C

#### B) Enclosure with intrinsic safety devices "ia":

ITALSMEA


I-20060 GESSATE (MI)

EJB...(1)

INERIS 00ATEX0021X

(Serial number)

(Year of construction)

 II 2 (1) GD

Ex d [ia] IIB or IIB + H<sub>2</sub> T6

Ex tD [iaD] or [ia] A21 IP65 or 66 or 67 T85°C (\*)


T.Amb :-25°C to 55°C or T.Amb :-50°C to 55°C

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation



C) Enclosure with intrinsic safety devices "ia" or "ib" :

ITALSMEA or TECHNOR ITALSMEA  
I-20060 GESSATE (MI)  
EJB...(1)  
INERIS 00ATEX0021X  
(Serial number)  
(Year of construction)

 II 2 (2) GD

Ex d [ia] or [ib] or [ia/ib] IIB or IIB+H<sub>2</sub> T6  
Ex tD [iaD] or [ibD] or [iaD/ibD] or [ia] or [ib] or [ia/ib] A21 IP65 or 66 or 67 T85°C (\*)  
T.Amb :-25°C to 55°C or T.Amb :-50°C to 55°C

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation

**ROUTINE EXAMINATIONS AND TESTS**

The routine examinations and tests are unchanged.

**(16) DESCRIPTIVE DOCUMENTS**

The descriptive documents quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- Addendum 1 to Technical Note TN-10-2000-01 rev 2 signed on 2009.04.07
- Use and maintenance instructions rev 6 signed on 2009.04.07

**(17) SPECIAL CONDITIONS FOR SAFE USE**

The special conditions for safe use are modified as follow :

Enclosures containing intrinsic safety devices are intended to be used in an ambient temperature range of -25°C to + 55°C. For lower temperature, a special variation is defined.

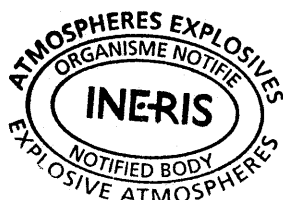
Enclosures containing Intrinsic Safety and Non Intrinsic Safety devices shall be fitted with an internal thermostat connected to a suitable device which switch off the power of the enclosure when the threshold of release is reached. Thermostat threshold of release is defined by the ambient temperature of intrinsic safety elements as follow:

Thermostat threshold of release	Ambient temperature for the enclosure	Ambient temperature for intrinsic safety devices
55°C ± 5°C	55°C	≥ 60°C
65°C ± 5°C	55°C	≥ 70°C

(18) **ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is unchanged.

Verneuil-en-Halatte, 2009 08 10



Director of the Certifying Body,  
By delegation  
T. HOUEIX  
Certification officer

## ADDITION

- (3) INERIS 00ATEX0021X/08
- (4) ENCLOSURE TYPE EJB...
- (5) Made by TECHNOR ITALSMEA

(15) PURPOSE OF THE ADDITION

Application of the following standards:

EN 60079-0 : 2009	IEC 60079-0 : 2007
EN 60079-1 : 2007	IEC 60079-1 : 2007
EN 60079-11 : 2012	IEC 60079-11 : 2011
EN 60079-31 : 2009	IEC 60079-31 : 2008

Mechanical modifications.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follow:

A) Enclosure without intrinsic safety devices :

TECHNOR ITALSMEA  
I-20060 GESSATE  
Italy  
EJB... (1)  
INERIS 00ATEX0021X  
(Serial number)  
(Year of construction)



II 2 GD

Ex d IIB (\*) Gb or Ex d IIB+H<sub>2</sub> (\*) Gb

Ex tb IIIC (\*\*) Db IP65 or 66 or 67

T.Amb : (\*\*\*)

T.cable : 90°C for T4 / T135°C or 110°C for T3 / T200°C

WARNING: DO NOT OPEN WHEN ENERGIZED

CABLE ENTRIES: SEE INSTRUCTIONS

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation.
- (\*) T6 or T5 or T4 or T3
- (\*\*) T85°C or T100°C or T135°C or T200°C
- (\*\*\*) To specify only if different from -20°C to +40°C and in the range from -50°C to +55°C.

B) Enclosure with intrinsic safety devices "ia":

TECHNOR ITALSMEA

I-20060 GESSATE


Italy

EJB... (1)

INERIS 00ATEX0021X

(Serial number)

(Year of construction)

 II 2 (1) GD

Ex d [ia Ga] IIB or IIB + H<sub>2</sub> T6 Gb

Ex tb [ia Da] IIIC T85°C Db IP65 or 66 or 67

T.Amb : (\*)

WARNING: DO NOT OPEN WHEN ENERGIZED

CABLE ENTRIES: SEE INSTRUCTIONS

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation.
- (\*) To specify only if different from -20°C to +40°C and in the range from -50°C to +55°C.

C) Enclosure with intrinsic safety devices "ib" :

TECHNOR ITALSMEA

I-20060 GESSATE


Italy

EJB... (1)

INERIS 00ATEX0021X

(Serial number)

(Year of construction)

 II 2 (2) GD

Ex d [ib] IIB or IIB+H<sub>2</sub> T6 Gb

Ex tb [ib] IIIC T85°C Db IP65 or 66 or 67

T.Amb : (\*)

WARNING: DO NOT OPEN WHEN ENERGIZED

CABLE ENTRIES: SEE INSTRUCTIONS

- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation.
- (\*) To specify only if different from -20°C to +40°C and in the range from -50°C to +55°C.

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

#### **ROUTINE EXAMINATIONS AND TESTS**

The routine examinations and tests are modified as follow :

Each sample of the enclosures defined above must have successfully passed before delivery an overpressure test in accordance with § 16.1 of the EN/IEC 60079-1 standard, of a period comprised between 10 and 60 seconds:

- under 11.7 bar for the enclosure EJB 13 for a minimum ambient temperature  $\geq -20^{\circ}\text{C}$ ,
- under 13.5 bar for the other enclosures for a minimum ambient temperature  $\geq -20^{\circ}\text{C}$ ,
- under 17 bar for all enclosures for a minimum ambient temperature  $< -20^{\circ}\text{C}$ .

#### **(16) DESCRIPTIVE DOCUMENTS**

The descriptive documents quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- |   |                  |
|---|------------------|
| - Technical note ref. TN1205 rev. B (4 pages)           | dated 2012.07.09 |
| - Instruction note ref. TN1205 Annex A rev. B (3 pages) | dated 2012.07.09 |
| - Drawing ref. AC1205 rev. B (sheets 1 to 7)            | dated 2012.07.09 |

#### **(17) SPECIAL CONDITIONS FOR SAFE USE**

The special conditions for safe use are modified as follow:

The gap of the flameproof joints is less than the values stated in the tables of EN/IEC 60079-1 standard.

The length of the flameproof joints is superior than the values stated in the tables en EN/IEC 60079-1 standard.

The screws used for the lid fastening must have a tensile strength  $\geq 800 \text{ N/mm}^2$ .

(18) **ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is completed as follows:

- Conformity to the European standards quoted on clause (15).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2013 01 31



A handwritten signature in black ink, appearing to be "D. Charpentier".

The Chief Executive Officer of INERIS  
By delegation  
D. CHARPENTIER  
Certification Division,  
Manager